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REMARKS

In accordance with the foregoing, claims 9, 14, 23 and 24 have been amended. Claims 9-15, 19 and 23-24 are pending and under consideration.

Claims 9, 10, 12, 13, 14, 15, 19 and 23 are rejected under 35 USC §103(a) as being obvious over US Patent No. 5,727,394 to Belding et al. in view of US Patent No. 3,844,737 to Macriss et al. Independent claim 9 requires that air from inside of the room be passed in a second passage of the heat exchange element. Independent claims 14, 23 and 24 contain similar, but somewhat different language. Belding et al. does not disclose or suggest passing air from inside the room through the second passage of the heat exchange element. Referring to FIG. 1 of Belding et al., secondary air 20 is passed to the indirect evaporative cooler 22. The secondary air 20 is derived from outdoor air 4/6. First, however, the outdoor air 4/6 is passed through the desiccant wheel 8.

The Examiner argues that it would have been obvious to modify Belding et al. to use air from inside the room instead of the secondary air 20. For this proposition, the Examiner relies upon Macriss et al. Belding et al. specifically requires that the secondary air 20 (and any air passed through the second passage of the indirect evaporative cooler 22) be as dry as possible. See column 6, lines 25-41. However, Macriss et al. teaches that air from a room is passed over an evaporating pad and then through a sensible heat exchanger. Macriss et al. discloses that relatively moist air is passed over a segmented portion of the sensible heat exchanger. See column 6, lines 12-21 of reference. Whereas Belding et al. requires dry air, Macriss et al. uses relatively moist air. Belding et al. teaches that one should not use the procedure disclosed in Macriss et al.

To address this argument, the Examiner cites column 6, lines 26-37 of the reference, which indicates a "portion of the process air directed along line 20 can include the purge air." Perhaps the Examiner believes that "purge air" relates to air removed from the room. However, column 5, lines 58-60 indicate that for the purpose "of cooling desiccant wheel 8, a purge stream of air may be passed through desiccant wheel 8 before passing process air therethrough. The fresh air purge may be introduced immediately after the regenerative step and before introduction of the process air." Accordingly, purge air is outside air, not air from the room. In further support of this argument, column 8, line 36 describe from air from conditioned space 30 is passed along line 32. Accordingly, when Belding et al. refers to air from inside the room, Belding et al. does so with reference number 32. Accordingly, we may be able to continue our arguments by addressing the Examiner's characterization of "purge air."

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Air from inside the room is going to be rich in carbon dioxide from the people within the room. It is important that this air be removed. Furthermore, the air from inside the room, which is rich in carbon dioxide, may be drier than the air from outside. Thus, air from inside the room may be a better source of air for the second passage of the heat exchange element.

Furthermore, there are costs associated with drying the air using the dehumidifier rotor. If air from inside the room is used instead of air from the dehumidifier rotor, then there may be more air available for air conditioning. Thus, the present invention may provide for (1) eliminating carbon dioxide, (2) using drier air that can cause more evaporation and (3) saving valuable dehumidified air.

The excerpt cited by the Examiner in no way suggests that air from inside the room should be passed through the second passage of the heat exchange element. The references cited by the Examiner, taken alone or in any proper combination, do not disclose or suggest that air from inside the room is passed through the second portion of the heat exchange element.

In addition to the above, independent claims 9, 23 and 24 have been amended to clarify that air from inside the room is passed directly to the second passage of the heat exchange element without first being passed through the dehumidifier rotor. Antecedent basis for this claim language can be found in the drawings. In Belding et al., outdoor air 4/6 is passed through the desiccant wheel 8 before being supplied to the second passage of the indirect evaporative cooler 22. As amended, the claims specifically require that air from inside the room be passed directly to the second passage of the heat exchange element without first being sent through the dehumidifier rotor. Belding et al. teaches the exact opposite. There is no suggestion for the claimed feature.

Claim 11 is separately rejected as being obvious over Belding et al. and Macriss et al. in further view of Niwa et al. This reference does not cure the deficiencies discussed above.

Claims 9-12, 14 and 23 are rejected under 35 USC §103(a) as being obvious over US Patent No. 6,361,588 to Moratalla et al. in view of US Patent No. 6,044,640 to Guimaraes.

Applicants previously argued that Moratalla does not have water supplied to the second passage of the heat exchange element. In response to this argument, the Examiner cites FIG. 5K of the reference. The Examiner argues that this drawing indicates that the moisture content in the air stream has been increased. Perhaps this is correct. However, this drawing does not indicate that liquid water is passed into the second passage of the heat exchange element.

Independent claims 9, 23 and 24 have been amended to specifically require liquid water. Independent claim 14 previously required water drops. There is no suggestion in either

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Moratalla et al. or Guimaraes to use liquid water. Accordingly, the rejection should be withdrawn.

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With regard to independent claim 14, this claim has been clarified to recite that the second passages of the heat exchange element have a flow section and a water section, air from inside the room being passed in the flow section, and water drops and outer air being passed in the water section. This is not a new feature. Independent claim 14, as examined in the first and second Office Actions, previously required that water drops and outer air be passed in a part of the second passage of the heat exchange element. None of the references disclose or suggest this feature.

In accordance with the foregoing amendments and remarks, it is submitted that the prior art rejections should be withdrawn.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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